

Please amend claim 19 as follows:

D1  
19. (Amended) A transgenic chicken having a transgene in the genetic material of its germ-line tissue, wherein the transgene comprises an exogenous gene, selected from the group consisting of *interferon*, *erythropoietin* and *GM-CSF*, and a constitutive promoter, in operational and positional relationship to express said exogenous gene, and said exogenous gene is expressed in the tubular gland cells of the oviduct of the transgenic chicken.

Please amend claim 27 as follows:

D2  
27. (Twice Amended) A method for producing an exogenous protein in a chicken oviduct, said protein selected from the group consisting of Interferon, Erythropoietin and GM-CSF, comprising:  
providing an ALV retroviral vector that comprises a coding sequence and a constitutive promoter operably linked to said coding sequence, where said promoter can effect expression of the coding sequence in the tubular gland cells of a chicken oviduct;  
creating transgenic cells by introducing said vector into chicken stage X embryonic cells, wherein the vector sequence is inserted into the chicken genome; and deriving a mature transgenic chicken from said transgenic cells, wherein tubular gland cells of the transgenic chicken express said coding sequence, resulting in the production of said exogenous protein.

Please amend claim 35 as follows:

D3  
35. (Thrice Amended) A method for producing a chicken egg which contains exogenous protein, selected from the group consisting of Interferon, Erythropoietin and GM-CSF, comprising:  
providing an ALV retroviral vector that comprises a coding sequence and a constitutive promoter operably linked to said coding sequence, wherein said promoter can effect expression of the coding sequence in the tubular gland cells of a chicken oviduct;  
creating transgenic cells by introducing said vector into chicken stage X embryonic cells, wherein the vector sequence is inserted into the chicken genome; and  
deriving a mature transgenic chicken from said transgenic cells, wherein the tubular gland cells of the transgenic chicken express the coding sequence, and the resulting protein is secreted into the oviduct lumen, so that the protein is deposited in the white of an egg.

Please amend claim 43 as follows:

D4 43. (Amended) The transgenic chicken of claim 35, wherein said constitutive promoter is a cytomegalovirus promoter. E

Please amend claim 44 as follows:

D5 44. (Amended) A transgenic chicken having a transgene in the genetic material of the tubular gland cells of its magnum, wherein the transgene comprises an exogenous gene and a promoter, in operational and positional relationship to express said exogenous gene, whereas said exogenous gene is selected from the group consisting of Interferon, Erythropoietin and GM-CSF, and said exogenous gene is expressed in the tubular gland cells of the transgenic chicken.

[Please amend claim 45 as follows: E

45. (Amended) The method of claim 27, wherein said constitutive promoter is the cytomegalovirus promoter.

Please amend claim 53 as follows:

D6 53. (Twice Amended) A transgenic chicken having a transgene in the genetic material of its germ-line tissue, wherein the transgene comprises an exogenous gene, selected from the group consisting of Interferon, Erythropoietin and GM-CSF, and a constitutive promoter, in operational and positional relationship to express said exogenous gene, and said exogenous gene is expressed in the tubular gland cells of the chicken oviduct of the transgenic chicken, and wherein the protein encoded by said exogenous gene is deposited in eggs of said transgenic chicken.

[Please amend claim 54 as follows: E

54. (Twice Amended) A transgenic chicken having a transgene in the genetic material of the tubular gland cells of its magnum, wherein the transgene comprises an exogenous gene, selected from the group consisting of Interferon, Erythropoietin and GM-CSF, and a constitutive promoter, in operational and positional relationship to express said exogenous gene, wherein said exogenous gene is expressed in the tubular gland cells of the transgenic chicken, and where the protein encoded by said exogenous gene is deposited in eggs of said transgenic chicken.

Please amend claim 55 as follows:

55. (Twice Amended) A method for producing protein, comprising:

providing a ALV retroviral vector that comprises a coding sequence, selected from the group consisting of Interferon, Erythropoietin and GM-CSF, and a constitutive promoter operably linked to said coding sequence, wherein said promoter can effect expression of the coding sequence in the tubular gland cells of a chicken oviduct;

creating transgenic cells by introducing said vector into chicken stage X embryonic cells, wherein the vector sequence is inserted into the chicken genome;

deriving a mature transgenic chicken from said transgenic cells, wherein the tubular gland cells of the transgenic chicken express the coding sequence, and the resulting protein is secreted into the oviduct lumen, so that the protein is deposited in the white of an egg; and Isolating said protein from said egg.

Please amend claim 57 as follows:

57. (Amended) Interferon isolated from an egg produced by a method of claim 35.

Please add new claim 58 as follows:

58. (New) Erythropoietin isolated from an egg produced by a method of claim 35.

[Please add new claim 59 as follows:]

59. (New) GM-CSF isolated from an egg produced by a method of claim 35.

#### REMARKS

Claims 19, 21, 25, 27, 29, 33 – 35, 41 – 49 and 52 – 57 are under examination and stand rejected under 35 U.S.C. § 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to make and/or use the invention. The Examiner's Office Action acknowledges that the Specification teaches the making of an ALV-base retroviral vector wherein the CMV promoter drives the expression of  $\beta$ -lactamase. The Action further notes Applicants teach the production of chimeric chickens by transducing stage X embryos with NLB-CMV-BL retroviral particles, but indicates that the Specification fails to show even a single transgenic founder obtained from the chimeric chickens capable of producing a